

#### Stakeholder Break Out Sessions



After the morning group session and windshield tour of AEDC, splinter groups of stakeholder and AEDC people discussed the questions posed by the Commander and the following charts were their report out briefs. The questions:

- 1. What is changing in your business that we should consider?
- 2. What services and capabilities do we need to change or improve?
- 3. What management procedures work for you and how might they work for AEDC?
- 4. What are your ideas on increasing information sharing and enhanced cooperation?
- 5. How can we ensure continued trust in AEDC if we open up our OCI provision?



### Stakeholder Group #1



Air Vehicles



## What is changing in your business that we should consider?



Group

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- The future is uncertain
  - Industry focus is short-term
- 16S Activate on Demand (good)
  - User reactivation fee (maintenance) is not appropriate
- Future requirements for 16S unclear
  - Maybe too big for future programs (Long range strike)
  - May need 8x8 tunnel with Mach capability .6 to 2.3
  - Need 16S for propulsion integration
- Government's role is to maintain, at an affordable price, national unique infrastructure
- Price is still the bottom line
  - \$/UOH and \$/data point are not as valued by our customers
    - Only technical people understand \$/data point, PM's don't
  - Competitors offer free tunnel time, we go to low price provider
  - Even at 66 cents on the dollar, you're still more expensive



### What services or capabilities do we need to change or improve?



#1

- Everyone is working on their own version of virtual presence
  - Need to integrate efforts
- Government and industry rules inhibit connectivity
  - Rules concerning network security
- Assets and inventories on-line to support planning (ongoing ITIS)
  - Can we include support for web-based business in the contract?
- Why can't the contractor be a single face to the customer?
  - Contracting, scheduling, cost and test
- Competitors guarantee test matrix (fixed price testing)
- AEDC pre-test planning costs are to high and not comparable to other wind tunnels. Improve pre-test planning experience
  - Drives bad behavior late arrival of test models
- Need better power contract
  - Current contract with TVA is terrible

# What management tactics, techniques, and procedures work for you and your thoughts on how they might work at AEDC?

- Identify core competency and stick to it
- Lean principles
- Knowledge management
- Stop with the \$ per data point
  - You're not as far ahead of your competition as you think
  - Drive to lower prices
- Time value of money
  - Faster reconciliation



## What are your ideas on increased information sharing and enhanced cooperation? Group



#1

- Stick to your primary mission
- Don't ask for a place at the table without specific value-added
- It's not government-industry teaming, it's government to government that's important
  - PSP
  - CFD
    Balance technology



# How can we ensure continued trust in AEDC if we open up our Organizational Conflict of Interest (OCI) provision? Group

- No concerns with industry vs. industry
- Another perspective:
  - AEDC shouldn't be reporting results interpretations to program offices/AFMC (tunnel performance only)
  - Results should come from the test customer
  - AEDC people in a program office could be inappropriate



# What should we be emphasizing in this competition that will enable us to be a better T&E provider? Group #1

- Ability to accommodate change and manage it
- Catalog pricing
- Productivity consistency
- Accommodate customer business changes into investment strategies
  - CTS controllers need improvement



### Stakeholder Group #2



#2

Space and Missile Test



## What is changing in your business that we should consider? (1)



- Space launch is evolving into a commodity
- Block upgrades to existing missile systems (ICBM & MD)
- Need to be able to perform maintenance of on-orbit assets in order to keep them operating for longer periods of time
- Exploit hypersonic technologies (LR Strike interceptors ----> commercial)
- Not as high a production rate as in the past, so maintaining own facilities may no longer be the best strategy
- Disposal of propellants (in space) is a big issue
- Larger projectiles
- Big need for a NWE capability



## What is changing in your business that we should consider? (2)



- EP propulsion, deployables, higher power/cooling, LN2 circuits
- Doing more with foreign partners, so will need to be able to easily bring them to AEDC (TAA issue)
- Everything is changing
  - Size of spacecraft will get bigger (won't fit in current chambers -- need at least 30 foot access)
  - Size of spacecraft also getting smaller
- With spiral development, use of facilities will be more often (repeated re-entries into facilities)
- Emphasize development T&E more



### What services or capabilities do we need to change or improve?



(1)

- Integrate across the spectrum of DT&E (M&S, Ground Test, Flight Test)
- Innovative Test Support (like THAAD)
- Facility reliability issues (plant, tunnel, data systems)
- Handbooks should capture current readiness of facilities
- Stay with R&D testing or get involved in production testing?
- Higher fidelity data for model development
- Will always need an on-site customer presence (project dependent)
- Need to lead and follow evolving technologies
- I WANT YOU WHEN I NEED YOU
- Need to be there to provide back-up/surge capability



### What services or capabilities do we need to change or improve?



(2)

- Keep runway capabilities
- MARK I lid access enlargement, as well as efficiencies in LN2 usage
- Need to do a better job of providing information on what we offer (current and future)
- Flexibility and lower costs
- Ensure safe operations (fall protection)

# What management tactics, techniques, and procedures work for you and your thoughts on how they might work at AEDC?

- National Team (MDA org concept)
- Standard control rooms and instrumentation (with customers as well as with other T&E providers) so that customers can run tests themselves or we can run tests at other locations
- Joint investments, as well as joint investment/infrastructure planning
- Run tanks next to the test stands (everyone else is doing it)
- Automation (crew size)
- Cost response time, accuracy and stability
- National testbed
- Simulated testing to sustain our technical expertise in periods of low real testing
- Use too much LN2 (go to Nitrogen gas)



## What are your ideas on increased information sharing and enhanced cooperation? (1)



- Data archival and retrieval
- Security requirements limiting real-time access to data
- More bandwidth (T1 ---> State-of-art)
- Standard analytic products
- Virtual presence
- We want data, not reports
- Why does it take 60 days to get our report, when we have most of the data we need in 24-hours -- need to have process in place to get the right information to the right people in the right time (flexibility and efficiency in providing products and utility of standard reports)
- NRPTA should include commercial members



## What are your ideas on increased information sharing and enhanced cooperation? (2) Froup



- Need on-line access (keep it current!)
  - Current capabilities and contacts
  - Planned enhancements
  - Pictures, test cells, limits, etc



# How can we ensure continued trust in AEDC if we open up our Organizational Conflict of Interest Group (OCI) provision? #2

- Open OCI not a factor in choosing AEDC
  - MDA (doing this with their National Team)
- Open OCI could be a factor in choosing AEDC, but could be OK with appropriate firewalls
  - TRW programs going through competition will be more sensitive than programs in which contract has already been awarded
  - Loral there is precedent in doing this
  - ICBM SPO
  - **P&W**



#### **What should we be emphasizing** in this competition that will enable us to be a better T&E provider?



- Outsource specific or unique capabilities and expertise
- Strategic partnerships (shared test operators)
- Contractor with an existing business base so that we can expand and contract as necessary
- Pay the operating contractor per data point
- Incentivize for cost reduction



#### Other "GEMS"



- Have we thought about splitting the contract into business area expertise in order to obtain full spectrum of knowledge/capabilities required or have we locked ourselves into a single contract
- We have too many people around for a \$290M TOA
- "Now that I've seen what you have, I feel better about paying my taxes"



### Stakeholder Group



#3

Airbreathing Engines



# How can we ensure continued trust in AEDC if we open up our Organizational Conflict of Interest Group (OCI) provision? #3

- Doubtful many companies interested at 5%- no matter the terms
- What if RR/Allison won contract?
  - Possible
  - Could add layer of bureaucracy



#### **What should we be emphasizing** in this competition that will enable us to be a better T&E provider?



- Leave enough flexibility to allow offerors to work in new **WBS**
- Emphasize business structure suited to "body shop" environment
  - Compete on overhead & benefits
- Emphasize terms of competition should be improved ways to operate & save
- Clearer delineation of responsibilities between gov't & contractors
- Look hard at more use of EVMS (Earned Value Management System)
- Look at cycle times. Should not have to wait a day between J1 & J2.
  - Pretest in Evendale 

    45 min.
- Retain expertise & ability to advance test technology (e.g., **Kurt Nichol)**



# What should we be emphasizing in this competition that will enable us to be a better T&E provider? (cont) #3



- Be ready for UAV/UCAV/JSF integrated propulsion systems
- Everyone wants to run as much & as fast as possible
  - Not once a week
- Incentivize & Hold accountable cost savings in contract profit terms



#### What are your ideas on increased information sharing and enhanced cooperation? Group



- Strategic investment coordination with OEM's
- **Body-shop contracts, same people here regardless of** who has the contract
- How do we get increased integration of models, test data, etc.



### What is changing in your business that we should consider?



- Business compete as well as partner with each other
  - Driven totally by cost
- Everything is global
- Integration of models a growing challenge



### What services or capabilities do we need to change or improve?



#3

- Build our own power station on base
- Make ASTF pools 10% of costs instead of 25%
- We have national assets that are essential to being competitive
- Reduce redundancy between gov't & industryredundancy between OEM & SvT)
- INCREASED gov't oversight may be going wrong <u>DIRECTION (OVERSIGHT</u> vs. insight)
- What do we tell bidders?
- One man- One mission?
- More access to analysis, Market it more
- Streamline processes that are dictated by gov't
  - Both Pre & Post test
- Processes are <u>EXCESSIVE</u>

# What management tactics, techniques, and procedures work for you and your thoughts on how they might work at AEDC?

- What about increasing profit potential in exchange for reduced cost?
- Industry has many partnerships which are necessary to remain competitive (rely on non-disclosure/ proprietary agreements)
- More use of  $6\sigma$  (6 Sigma) methodology to identify "heavy hitters" associated with overall costs of processes



#### Other "GEMS"



- 1. How many times do we have to do this until we get it right & don't have to do it anymore?
- 2. Strategic intent- how to align investment plans with industry & avoid duplication & overcapacity
- 3. Group never had enough info to meaningfully participate- still working on last one. Preparation doesn't match expectations.
- 4. Agree set actions, OPR's, dates by day's end.
- 5. With test 30% power- are our reductions realistic? (can change power- not much)
- 6. What about our own power station- more flexibility (make analytical decision)
- Show PW & All investment plans, through put, capacity, etc



#### Other "GEMS" (cont.)



- 8. "Asked us to do brain surgery & started us on the other end"
- Antiquated processes, multiple redundancies, too many people in control room
- 10. What are all those WAGE guys doing?
- 11. From briefing this morning- PW has not been able to use "excuse" of inflation for many years
- 12. COST IS NOT JUST COST. It can be changed